

## Pickles Problem Solver

CONDITION	CAUSE	PREVENTION/SOLUTION
Pickling liquid is cloudy.	Food spoilage caused by underprocessing. <i>Discard</i> the pickles.	Use only tested recipes and process for the recommended length of time.
	Minerals present in the water used.	Use soft water. Hard water contains minerals.
	Anti-caking agent, an additive found in table salt.	When canning, use <u>Ball<sup>®</sup> Salt</u> <u>for Pickling &amp; Preserving</u> , which does not contain additives.
Pickling liquid is pink.	Overmature dill used.	Always use the freshest ingredients when fresh preserving. The product is still safe, however.
	Yeast growth caused by underprocessing. Yeast growth may also make pickles cloudy or slimy. Discard the pickles.	Follow a tested recipe and process jars for the recommended length of time.
Pickles are darkened or discolored.	Minerals present in the water used.	Use soft water. Hard water contains minerals.
	Brass, iron, copper, aluminum or zinc utensils used.	Use unchipped enamelware, glass, stainless steel or stoneware utensils when making pickles. The minerals in materials react with the acid in the pickling liquid.
	Ground spices used.	Use whole spices.
	Whole spices left in jar of pickles.	Whole spices used to flavor pickling liquid, including those contained in a spice bag, should be removed before preserving.
Pickles are hollow.	Faulty growth of cucumbers.	None.To identify if cucumbers are hollow before using them, place in a bowl of water. Hollow cucumbers will float.These cucumbers are best suited to making relish.



CONDITION	CAUSE	PREVENTION/SOLUTION
Pickles are spotted, dull or faded.	Cucumbers were not well brined.	Use the recommended ratio of water to salt. Complete the fermentation process.
	Excessive exposure to light during storage.	Store fresh preserved food in a dark, dry, cool place (70 to 75°F).
	Poor quality cucumbers used.	Always use high-quality produce, good enough to eat.
Pickles are shriveled.	Too much salt, sugar or vinegar was added to the cucumbers at once.	Gradually add salt, sugar or vinegar until the full amount has been incorporated.
	Cucumbers were brined in a solution that was too strong, using syrup that was too heavy or using vinegar with more than 5% acidity.	Follow a current, tested recipe, using the recommended amounts of salt, sugar and vinegar at 5% acidity.
	Cucumbers were not fresh when brined.	Brine cucumbers within 24 hours of harvest, or refrigerate until ready to use. Pickling cucumbers deteriorate very rapidly, especially at room temperature.
	Whole cucumbers were not pricked before preserving.	Prick whole cucumbers before canning to allow the brine to saturate and plump the flesh of the cucumbers.
	Cucumbers had a wax coating that prevented the brine from penetrating the peel.	Check to make sure your cucumbers are unwaxed. Pickling cucumbers and English cucumbers are not waxed, but some field cucumbers are.
	Overcooking or overprocessing.	Follow recommended cooking and processing times in a current, tested recipe.
There is white sediment on the bottom of the jar.	Harmless yeasts have grown on the surface and then settled to the bottom.	None.The presence of a small amount of white sediment is normal.
	Additives in table salt.	When canning, use <u>Ball<sup>®</sup> Salt</u> for <u>Pickling &amp; Preserving</u> which does notcontain additives.



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Pickles lack crispness.	Poor quality cucumbers used.	Choose high quality cucumbers and use them within 24 hours of harvest.
	A cucumber variety used that is not recommended for pickling and canning.	Use only pickling cucumbers. Other varieties may be good choices for relishes or chutneys.
	A crisping agent not used.	Use a crisping agent such as Ball® Pickle Crisp® Granules.
Pickles are soft or slippery.	Blossom ends of cucumbers were not removed.	Cut 1/16 inch off blossom ends of pickling cucumbers.The blossom end contains enzymes that may cause softening.
	Brine or vinegar was too weak.	Use <u>Ball<sup>®</sup> Salt for Pickling &amp; Preserving</u> and vinegar with 5% acidity. Follow a current, tested recipe for proper ratios of salt to vinegar.
	Scum was not removed daily from the top of the brine during fermentation.	Completely remove scum daily during fermentation.
	Pickles were not completely covered with brine during fermentation.	Pickles must be completely covered with brine during fermentation and in the jar.
	Pickles were underprocessed and spoilage is occurring. <i>Discard the pickles</i> .	Follow the recommended processing time in a current, tested recipe using a boiling water canner.
Pickles have a strong, bitter taste.	Spices were old, they were cooked too long in the vinegar or the quantity was excessive.	Use fresh spices — whole spices should be used within 3 to 4 years of purchase. Follow current, tested recipes to ensure quantities and times are correct.
	Vinegar used was too strong.	Use vinegar with the proper strength for fresh preserving: 5% acidity.
	Salt substitutes used in place of <u>Ball<sup>®</sup> Salt for Pickling &amp; Preserving</u> .	Salt substitutes contain potassium chloride, which is naturally bitter.



CONDITION	CAUSE	PREVENTION/SOLUTION
There is scum on the brine.	Surface scum that forms during fermentation is a result of yeast, mold and bacteria feeding on the acid. If they are allowed to accumulate, they will reduce its concentration.	Completely remove scum daily from the surface of the brine during fermentation.
Garlic cloves are green, blue or bluish-green.	Immature garlic used.	Cure immature bulbs for 2 to 4 weeks at 70°F. Garlic and pickles are safe to eat.
	A chemical reaction caused by the interaction of the pigments in the garlic with the iron, tin or aluminum in a reactive cooking pot, hard water or water pipes.	None. Garlic and pickles are safe to eat. Using soft water may help.
	Garlic may naturally have more blue pigment, and this may become more evident after pickling.	None.
Cauliflower is pink.	A chemical reaction caused by the interaction of pickling liquid acid with the pigment of the cauliflower.	None. Pink cauliflower is safe to eat.